Alexander Deposition Transcript Excerpts

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Page 1
                  IN THE UNITED STATES DISTRICT COURT
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                   FOR THE WESTERN DISTRICT OF TEXAS
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                           AUSTIN DIVISION
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        UNITED STATES OF AMERICA,
                 Plaintiff,
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                                         Case
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        v.
                                        No. 1:23-cv-00853-DAE
        GREG ABBOTT, in his
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        capacity as GOVERNOR OF
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        THE STATE OF TEXAS, and
        THE STATE OF TEXAS,
 8
                 Defendants.
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                          ORAL DEPOSITION OF
                       KATHY ANN ALEXANDER, PhD
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14
                         Monday, July 8, 2024
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                 ORAL DEPOSITION OF KATHY ANN ALEXANDER, PhD,
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      produced as a witness at the instance of the Plaintiff,
      United States of America, and duly sworn, was taken in
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      the above-styled and numbered cause on the 8th of
18
      July, 2024, from 9:04 a.m. to 11:48 a.m., before Sharon
      Ross, Certified Shorthand Reporter in and for the State
      of Texas, reported by computerized stenotype machine, at
19
      the US Attorney's Office for the Western District of
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      Texas, 903 San Jacinto Boulevard, Suite 334, Austin,
      Texas 78701, pursuant to the Federal Rules of Civil
      Procedure and/or any provisions stated on the record or
21
      attached hereto.
2.2
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      Reported by:
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      SHARON ROSS, Texas CSR #1961,
      Hawaii CSR #432, RMR, CRR, CRC
25
      Realtime Systems Administrator
      Job No. CS6783937
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Page 8 (Discussion off the record.) 1 2. Ο. (BY MR. HARRISON) And the court reporter is recording everything that's said here and can only 3 record words. 4 So I ask that you answer each question with 5 6 a verbal response and also avoid the uh-huhs and the 7 huh-uhs which are common in our everyday conversation but hard for the court reporter to capture. 8 Do you understand? 9 10 Α. Yes. Have you taken or do you intend to take any 11 12 medication that would affect your ability to testify 13 truthfully or accurately today? 14 Α. No. 15 Q. From time to time your counsel may object to my 16 questions of you. After the objection, you are to go 17 ahead and answer the question unless he instructs you 18 not to do so. 19 Do you understand? 20 Α. Yes. 21 And we'll try to take a few breaks as necessary 22 but if you need a break at any time, please let me know, and we can do so. 23

question cannot be pending while we take a break.

And the only thing that I ask is that a

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Page 9
           Α.
               Okay.
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           0.
               Dr. Alexander, what did you do to prepare for
      today's deposition?
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           A. I met with my attorneys and I -- that's
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      basically it.
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           Q. What did -- when you say "my attorneys," do you
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      mean those within TCEQ or with the Texas Attorney
      General's Office?
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               Both.
           A.
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               Did you review any documents?
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           A.
                    Well -- excuse me. I did look at my
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      opinion. So if that's considered to be a document,
      then, yes.
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           Q. Here, I'll show you it. When you say
      "opinion," I'm showing you what we can mark as Alexander
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      1.
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                     (Alexander Exhibit 1 marked.)
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           Q. (BY MR. HARRISON) If I can direct your
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      attention to Page 8, would you say your opinion is
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      that -- is the substance contained on Pages 8 through
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      11?
           A. Yes.
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                     (Mr. Herman Settlemeyer is now present.)
               (BY MR. HARRISON) Did you review any other
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           Q.
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      documents to prepare?
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Page 10 1 Α. No. 2 Q. When did you meet with your lawyers to prepare for today's deposition? 3 4 A. Last week. 5 Q. And about how long did that meeting take? 6 Α. Oh, two and a half hours or so. 7 Q. Have you spoken to anyone else in preparation for your deposition today? 8 Α. 9 No. 10 Have you spoken to any of the experts that 11 Texas has retained in this case? 12 Α. No. 13 Did you do anything else to prepare? 14 Α. No. 15 You said you had been deposed about 20 times Q. 16 before. Were you serving as an expert witness in all of 17 those depositions? 18 Α. Yes. 19 Let's start with the most recent one which I Q. think you said was last year. Do you recall the nature 20 21 of that case and the name of it? 22 Yes. It was the application by the Port of 23 Corpus Christi Authority of Nueces County for a water 24 use permit. 25 Q. And what was the general subject matter of your

Page 11 deposition testimony? 1 2 A. Generally the implementation of the Texas Water Code, TCEQ's rules, and granting a water right. 3 And you were testifying on behalf of TCEQ? 4 5 Α. Yes. Did you also provide testimony in that case at 6 7 a court or administrative hearing? Α. Yes. 8 What about prior to the Corpus Christi 9 application? When was the --10 The City of Wichita Falls' application for a 11 12 water use permit, 13404. Q. And what was your test -- what was your 13 testimony concerning in that case? 14 15 The Tex -- implementation of the Texas Water Code, TCEQ's rules, and TCEQ policy and reviewing a 16 17 water right application. 18 Q. And did you also provide testimony at a court 19 or administrative hearing for that matter? 20 Α. Yes. 21 Q. When was the -- when were those proceedings? 22 Α. I believe they were in the 2023, '24 time frame. 23 And I'll ask about maybe just one more, then. 24 Q. 25 Any deposition testimony prior to the City

Page 13 1 Α. Yes. 2 Q. And were you testifying an ex -- as an expert for TCEQ in that matter? 3 4 Α. Yes. 5 Q. And what was the substance of your testimony there? 6 Α. 7 The same as the other cases. And you were deposed in that matter? 8 Q. 9 Α. Yes. Was that a -- also a judicial proceeding? 10 it go beyond an administrative hearing and go to a 11 judicial proceeding? 12 13 Α. Yes. Did you provide testimony at any hearing or 14 15 trial in front of the -- for the judicial proceeding? 16 Α. No. 17 Did you submit pretrial -- written pretrial 18 testimony or anything similar to that? 19 Α. I don't understand the --20 Q. Sure. 21 Α. -- quest --Did you submit anything to the judicial -- for 2.2 the judicial proceedings, whether it be written 23 testimony or a declaration or something along those 24 25 lines?

Page 14 Α. 1 No. 2 Ο. Have you ever testified in a case where you were not serving as an expert? 3 4 Α. No. 5 Q. What have you been asked to do in this case? I'm here as -- in a representative capacity for 6 Α. 7 the TCEQ and I'm here to talk about Texas Water Code and its associated regulations and water rights permitting. 8 9 0. Were you provided with any assumptions by Texas' counsel to form your opinions? 10 11 Α. I was asked to look at several things, yes. 12 What were those several things that you were 0. asked to look at? 13 14 My understanding is that there was some 15 discussion of different things that could be done in the 16 Rio Grande, and I was asked to weigh in on those from a 17 water rights permitting perspective, which is the 18 substance of my opinions. 19 What were you told the different things that 20 could be done were? 21 I think there were suggestions about dredging or locks and dams. I think those are embodied in items 22 23 5, 6, and 7 in my opinions.

pertains to the dredging or locks and dams?

Were you provided any information as it

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Page 15 1 A. No. 2 Q. Were you provided with any other facts to help 3 you form the basis of your opinions? Α. 4 No. 5 Q. Were you provided with any documents? Α. I might have looked at some of the documents in 6 7 this case. Do you recall which ones those were? 8 0. I think I have looked at some of the deposition 9 A. 10 testimony and briefly looked at the many court filings 11 that the attorneys had done, but I didn't do a 12 in-thorough review and analysis of any of that material. 13 It was just to situate myself for kind of what we were 14 talking about today. 15 Sure. What were the deposition testimonies that you reviewed? 16 17 I looked at Adrian Cortez' deposition. Anyone else? 18 Q. 19 I think there were a couple others. I don't Α. recall the names. I -- like I said, I did not like 20 21 study them or anything like that. Was one Tim MacAllister? 22 23 Α. It could have been. 24 Q. But not Ben Johnson? 25 Α. I have no idea. It's been several months.

Page 16 So -- and, again, I didn't --1 Q. Sure. Α. -- study them. 3 Captain John Timmel? 4 Q. I don't recall. Α. Was there anything -- or do you know 6 Mr. Cortez? 7 8 Α. Yes. 9 Q. How do you know Mr. Cortez? We served together on the Rio Grande high 10 Α. quality work group and he -- we do have interactions 11 12 with the International Boundary and Water Commission. THE REPORTER: Could you speak up just a 13 14 little bit? Thank you. 15 (BY MR. HARRISON) In reviewing the --Mr. Cortez' deposition testimony, is there anything that 16 17 you recall you disagreeing with in his deposition 18 testimony? 19 A. I think I'd have to say that some of his --20 some of the text in there related to Texas water rights 21 management may not have been presented in the way that 22 we would have done it as the entity that manages water rights in Texas. 23 Q. Anything else that you would disagree with from 24 25 his testimony?

A. Not that I recall.

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- Q. You also said you looked at some of the court filings. Do you recall which court filings you may have reviewed?
- A. There were quite a number. Y'all have been trading paper back and forth. So -- and I'm not an attorney. So I don't recall specific items, no.
- Q. Did any of the documents you reviewed, the deposition testimony, or the court filings, help form the basis of your -- of the opinions that you reached here?
 - A. No.
- Q. Did you speak to anyone about the opinions that you formed?
 - A. Not -- not anyone except for what I've already mentioned.
- Q. Did you review any of the expert reports in this case?
 - A. No.
- Q. Dr. Alexander, you are employed with the Texas
- 21 Commission on Environmental Quality?
 - A. Yes.
- Q. And so we'll refer to that as TCEQ today, if that's -- that's fine?
- 25 A. That's great. Thank you.

- Q. What is your position with TCEQ?
- A. I'm the senior policy and technical analyst for TCEQ's Water Availability Division.
 - Q. And what do you do in that role?
- A. I provide support to the water rights

 permitting and Watermaster Programs and to the deputy

 director of the Water Availability Division.
- Q. And what does the Water Availability Division do?
- A. The Water Availability Division covers the water rights permitting program, the Watermaster Programs for the three Watermaster areas that we have and it also -- we have a groundwater protection component with which I don't have much interaction. I'm pretty focused on surface water.
- Q. And when you -- so the permitting would be for the permitting of water rights or water permits?
 - A. Yes.

- Q. And then you said the Watermaster -- there are three of those. Could you briefly explain?
- A. So we have Watermaster Programs in the Brazos
 River basin, obviously in the Rio Grande; and we also
 have the South Texas and Concho program that covers
 basically basins from Corpus Christi up through the
 Lavaca River and also the Concho River

Page 23 MR. HARRISON: Yes, it's the June 14th, 1 2 2024, letter to Brian Lynk. MR. TEBO: Thank you. 3 4 (BY MR. HARRISON) I'm on Page 8 and --5 starting on Page 8 and, I guess, Pages 9 through the top of 11 as well. 6 7 And if you need to take a minute to read 8 them to yourself, please let me know; but do the seven 9 numbered paragraphs on Pages 9 through 11 of Exhibit 1 accurately reflect the information and opinions that you 10 are testifying to in this case? 11 12 Α. Yes. And do the seven numbered paragraphs on Pages 9 13 through 11 of Exhibit 1 contain all of the opinions and 14 15 testimony that you intend to offer at trial? Α. 16 Yes. 17 Have you been asked to form any other opinions in this case? 18 19 Α. No. Have you been asked to do anything else in this 20 21 case? 22 Α. No. If I could -- if we could go to the paragraph 23 24 below No. 11 on Page 8. 25 (Witness complies.) Α.

Page 24 First sentence there says, "Dr. Alexander is 1 2 not retained or specially employed to provide expert 3 testimony in this case. Dr. Alexander is a person whose 4 duties regularly involve giving expert testimony in 5 matters relating to water rights" and permitting 6 "management in Texas." 7 Is that a correct -- is that a correct 8 statement? That's basically what it says there. I believe 9 10 that actual text says "expert testimony in matters 11 relating to water rights permitting and management in 12 Texas." 13 0. Okay. So in your current role at TCEQ, your 14 duties include regularly giving expert testimony on 15 water rights, permitting, and management? 16 Α. Yes. 17 And that's what you'll be providing testimony 18 in this case about? 19 A. Yes. So a few lines down in that paragraph, it says, 20 21 "Dr. Alexander is expected to testify regarding"; and 22 then there is a list where it says, "which includes such as." What -- and the first one is "interbasin 23 24 transfers." 25 What testimony do you intend to provide

about interbasin transfers?

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- A. So to the extent that interbasin transfers are part of the water rights permitting regulatory scheme, if I was asked questions about that, I would provide those answers.
 - O. What are interbasin transfers?
- A. Under Texas Water Code section 11.085, it's the move re -- movement of state water from one river basin to another.
- Q. Next on the list it says, "water availability determinations."

What testimony do you intend to provide about water availability determinations?

A. So I think that's embodied in my list of opinions, and part of my job duties are to make assessments of whether there's water available for appropriation.

And I don't believe there's water available for appropriation in the Rio Grande, as I've stated in my opinions.

- Q. Next on the list says, "Texas' hydrology, regulatory" -- or "Texas' hydrology."
- What testimony do you intend to provide about Texas' hydrology?
 - A. To the extent that hydrology guides water

Page 30 operations? 1 2 A. Well, to the extent that we're in a drought, they absolutely affect operations of the Tex -- of the 3 Rio Grande Watermaster. 4 5 Q. So the next item is "implementation and the operation of relevant treaties, laws, regulations, and 6 policies." 7 8 What are the relevant treaties that you're referring to here? 9 10 The 1944 Water Treaty between the US and Mexico. 11 12 Q. And what are the relevant laws that you're referring to? 13 Again, the Texas Water Code and supplemental 14 regulations. 15 16 Q. And what are the relevant policies? As embodied in TCEQ's rules. 17 Α. 18 Q. Okay. 19 Those -- those type of things, yes. Α. 20 Are you providing any testimony as to the 21 operation of relevant federal laws? A. No. There are no relevant federal laws in 22 water rights permitting. 23

local, and tribal entities."

Q. The next item is "relevant federal, state,

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Who are the relevant federal, state, local, and tribal entities?

- A. That's a pretty broad question. Can you --
- Q. Sure. So maybe like --

- A. -- narrow that down a little bit?
- Q. Let's break it up. So you'll -- what testimony do you intend to provide about the relevant federal entities involved?
- A. So I'm here, again, to provide information on TCEQ's water rights permitting program, Chapter 11, and its implementing regulations.

So to the extent that some of our operations are guided by, for example, the International Boundary and Water Commission and its role in ensuring that water is delivered to Texas under the treaty, there may be some information related to that, if I were asked.

- Q. What is TCEQ's role in implementing the 1944 Water Treaty?
- A. TCEQ doesn't have a role in implementing the treaty. The treaty is intended to provide the water for Texas uses -- uses. And once the water has been provided, then Texas law governs how it's used and how we operate the Rio Grande.
 - Q. And then the last item in the list -- or in the

Page 32 1 paragraph on Page 8 of Exhibit 1 says "reasonableness of 2 possible improvements to make the Rio Grande River 3 suitable for navigation as proposed by the USA, 4 including between Mile Markers 275.5 and 610." 5 Are you providing -- are you providing an 6 expert opinion on the reasonableness of the possible 7 improvements? 8 A. Yes. That's items 5, 6, and 7 in my opinion. What do you mean by "reasonableness"? 9 Q. 10 A. So if something's not possible, it's probably 11 not reasonable; and I think that's what I've set out in 12 opinions 5, 6, and 7. 13 And then when you say "possible improvements," 14 are those the two that we discussed earlier, the 15 dredging and the canal? 16 The dredging, the locks and dams, new water 17 rights for navigation under Texas law, the items 5, 6, 18 and 7, in my opinion. 19 Q. All right. If you could look at paragraph 1 on Page 9 of Exhibit 1. 20 21 Α. (Witness complies.) 22 It says, quote, "State water is defined by Texas law as 'the ordinary flow, underflow, and tides of 23 24 every flowing river, natural stream, and lake, and of 25 every bay or arm of the Gulf of Mexico, and the storm

water [sic], floodwater, and rainwater of every river,
natural stream, canyon, ravine, depression, and
watershed in the state' and is in the property of the
state."

This is a quote from Texas Water Code 11.021(a)?

A. Yes.

- Q. What happens for water that flows into Texas from outside of the state? Does that become state water once it crosses into the State of Texas?
 - A. So I'm not sure I understand your question.
- Q. Sure. So if there's a river that flows between a state and Texas, does the water become Texas state water once that water comes into the state?
 - A. Yes.
- Q. The next sentence says, "The US share of water flowing in the Rio Grande is state water."

What is the basis for that statement?

- A. So the basis for that statement is that the water that's in the Rio Grande, once it's delivered by Mexico, is for Texas' use; and that makes it state water.
- Q. And then the next sentence says, "State water may be used for the beneficial purposes of use defined in the Texas Water Code and TCEQ's rules; and it cites

- Q. Are you aware of any water that's been reserved from appropriation by TCEQ?
 - A. No.

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- Q. But it would be possible to do that, correct?
- A. Yes.
- Q. The second sentence on paragraph 2, Page 9, Exhibit 1, says "There" -- sorry to keep jumping back and forth.
 - A. That's okay.
- Q. "There are water rights in the State of Texas that include navigation as an authored beneficial purpose of use; however, none of those water rights are in the Rio Grande."

Did I read that correctly?

- A. Yes.
 - Q. And what is the basis for this statement?
- A. A review of our records.
- Q. So while there are no water rights currently in the Water [sic] Grande that include navigation as a beneficial purpose of use, is that to say that that could never be the case?
 - A. I'm not sure I understand your question.
- Q. Sure. Is it possible that navigation could be included as an authorized beneficial use in the future?
 - A. If a water right holder for a Texas water right

requested it.

- Q. And it could also be an incidental use to another one of the beneficial uses, correct?
 - A. Yes.
- Q. And so just because water has been appropriated for municipal use doesn't mean that it can't be used for navigation?
- A. What that -- so what an incidental use is -- is that is as the water is, for example, released from storage to a downstream user, as it travels down the stream to its ultimate beneficial consumptive use, it may have ancillary benefits such as environment -- the environment or navigation or whatever but it's not an additional amount --
 - Q. Uh-huh.
 - A. -- in addition to the municipal use.
- Q. And so just because there have -- there are no water rights appropriated for navigation doesn't mean that a -- water cannot be navigable, correct?

MR. TEBO: Objection, form.

- A. I don't understand that question at all.
- Q. (BY MR. HARRISON) Looking at the next two sentences, paragraph 2, it says, "In wa" -- Page 9 --
- A. Uh-huh.
 - Q. -- "In water rights that authorize navigation,

Page 50 1 navigation is not the only beneficial use authorized in 2 the water right. Navigation is an incidental use 3 whereby water that is diverted or released for other 4 purposes could also be used to support navigation as 5 part of the water" rights -- "water right holder's 6 operations." 7 And that's what we just talked about? 8 **A** . Yes. And then the last sentence, it says, "The use 9 10 of water for navigation would not be in addition to the 11 authorized beneficial purposes of use in the water right 12 such as municipal, agricultural, or industrial use." 13 And that's the same thing that we were 14 also --15 Α. Yes. 16 What in paragraph 2 on Page 9 of Exhibit 1 17 constitutes your expert opinion? 18 So just like with statement 1, this is my 19 expert opinion about how water rights for navigation 20 uses or other non-consumptive uses would work in the 21 State of Texas based on my experience in water rights 22 permitting. 23 So moving to paragraph 3, it says, "Water 24 rights in other parts of the state include provisions to 25 protect navigation use, such as subordination of other

Page 51 uses to navigation or cancellation of the water right if 1 2 the water is needed for navigation. These provisions were included in the water right at the time the 3 water ... was originally granted" -- or "water right was 4 5 originally granted." 6 Did I read that correctly? 7 Α. Yes. And what's the basis for that statement? 8 0. My knowledge of water rights permitting in 9 A. 10 Texas and what's in particular permits based on 25 years 11 of experience and knowledge of specific permits. 12 And such provisions are not included for any 0. 13 water rights on the Rio Grande --14 Α. No --15 -- to your knowledge? Q. 16 Α. No, they're not. 17 The same question on paragraph 3, what in paragraph 3 constitutes your expert opinion? 18 19 This is based on my 25 years of experience, knowledge of the Water Code and TCEQ's rules and what's 20 21 embodied in water rights in the State of Texas in terms 22 of their authorizations. (Mr. Johnathan Stone is no longer present.) 23 24 Ο. (BY MR. HARRISON) Paragraph 4 starts at the 25 bottom of Page 9. It says, "TCEQ's Water Rights

Permitting program manages the water rights permitting process, which includes issuing new water rights or amending existing water rights" and cites to the Texas Administrative Code Chapters 295, 297, and 303.

Could you explain the water rights permitting process for a new water right?

- A. So a person who wants to -- are you talking an appropriation just so we're clear?
 - Q. Yes, yes, that --

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A. So if someone wants to appropriate water in the State of Texas, they -- we have an administrative process that begins with a pre-application meeting.

They complete the forms and give us all the information that's required on those forms.

We perform a technical review of the application -- for most applications. I'm speaking very generally.

- Q. Uh-huh.
- A. There's nuances, you know, and various types of applications; but we would do a technical review and come to a determination. And for new appropriations, Texas Water Code 11.34 gives us the criteria that we would use for making those determinations.
 - Q. What is part of the technical review?
 - A. At -- that's an extremely broad question. So

correct.

- Q. You said the Federal Government holds a few water rights permits across the state. What permits are you aware of that they have?
- A. There are some water use permits or certificates of adjudication for things like wildlife refuges where they're -- the federal entity is diverting state water to support the refuge.

I mean, that's what mostly comes to mind when I'm thinking about the Federal Government permitting.

- Q. Are there any, to your knowledge, for federal civil works projects?
- A. There may be, yes. I don't think I can name them off the top of my head, though.
- Q. Do you have any idea or sense of what projects those might be or where they may be located?
- A. I'd have to review TCEQ's records in order to look at that.
- Q. Do you know who the applicants might have been in those situations?
- Q. So you -- yes. So you had said that the

 Federal Government holds a few permits, and so I was

Page 56 just asking if you know who the applicants were for 1 2 those permits. A. So I'm aware of the US Army Corps of Engineers 3 holds a water right for a -- like a duck pond area by 4 Lake Somerville. 5 6 The Fish and Wildlife Service holds water 7 rights for wildlife refuges. The Bureau of Reclamation was identified as 8 an owner on several of their projects, I believe, in --9 10 when they were originally issued. 11 And those would have been issued back in the 12 1950s, '60s, '70s or --13 A. It would vary depending on kind of when the 14 project was initiated. So I -- you know, I don't have 15 an exact date range to give you. 16 Q. Were any of the Federal Government permits that 17 were issued for purposes of navigation? 18 Α. Not that I'm aware of. 19 Were any of the Federal Government permits that Q. 20 you're referencing on the Rio Grande? 21 I believe some of the wildlife refuges could be on the Rio Grande, but I'm not like 100 percent sure 22 23 about that. 24 Q. If we could turn to paragraph 5 on Page 10 of 25 Exhibit 1, it says, quote, "Releasing water solely for

Page 57 the" purposes -- "solely for the purpose of raising the 1 2 water depth in the Rio Grande for purposes of navigation 3 is not reasonable because in Texas water right would be required" -- I'll stop there. 4 5 And it cites to Texas Water Code section 6 11.121; is that correct? 7 A. Yes. 8 0. What do you mean by -- when you say "not 9 reasonable"? 10 So if something's not possible, it's not 11 reasonable. I think I've already answered that 12 question. 13 Q. But navigation -- I think we've talked about 14 this. Navigation could be an incidental benefit from 15 other beneficial uses, correct? 16 Α. It could be. 17 And so if the use of water was occurring for 18 other beneficial uses and that resulted in benefits for 19 navigational purposes, a water right would not be 20 required, correct? 21 A. Can you state that again? Sure. So if the water -- if the use of the 22 Q. 23 water was occurring for other beneficial uses and 24 navigation was an incidental benefit of that use, they 25 wouldn't need a water right for navigation, would they?

A. If someone was using the water for a beneficial purpose of use, navigation, they would need to add that purpose of use to their water right.

Q. So the rest of the sentence there says, quote, "acquiring a ... water right would not be possible for the following reasons: a, there is no water available for a new appropriation of water in the Rio Grande."

So I think we've talked about this a little bit, but what does that mean?

A. That means that in order -- in order to get a new water right or a new appropriation, water has to be found available. That's in section 11.134 of the Texas Water Code.

And so there is no water in excess of the needs of the appropriators in the Rio Grande. So that means there's no water available for a new appropriation. All the water has been spoken for.

- Q. So no water currently available?
- A. I think there's no water available for a new appropriation in the Rio Grande.
- Q. Are you also speaking for in the future as well?
- A. I think there's no water available for appropriation in the Rio Grande.
 - I don't -- I don't under -- I don't -- in

looking at the amount of water that's supplied by the watershed, I don't see there being a substantial increase in that in the future.

And like we've talked about before, even if there were, all the existing uses would have to be 100 percent fully satisfied before we could grant a new water right.

- Q. But there's still a chance that water could become available for a new appropriation in the future, correct?
 - A. I don't see how that's possible.
- Q. Say that if the drought no longer becomes -there's no longer a drought but there's periods of
 increased rain and water, would -- would that increase
 then potentially provide additional water that could be
 available for a new appropriation?
- A. So when we're looking at water availability for a new appropriation, it's based on a long-term historical record that includes both droughts and high flows.

So simply having a couple of high-flow years is not going to change the determination of water availability in any basin across the state.

Oh, I'm sorry.

Q. Oh, no worries.

but maybe I'll ask you again or I'll ask something -- an earlier question.

So if I was a -- if I owned land on the river -- on a river, a state water, and I needed to do bank stabilization work, would I need a water right or permit in order to have my contractor come in and fix the bank or repair or do construction to the bank?

A. It depends.

- Q. So if they needed to put a barge in the water to stabilize the bank, would that require a water right or permit?
- A. I don't believe putting a barge in the water would require a permit.
- Q. If they put construction equipment in the water, would that -- would that require a permit?
- A. I don't think that would require a permit either.
- Q. But if they determined -- say the contractor determined that in order to stabilize the bank, I needed to build a bulkhead or do something along those lines.

 Is that a point at which I would need to get a water right?
- A. You know, I think those determinations are made on facts in an application. I think, you know, you have to have the exact parameters of the project in front of

you to make that kind of decision -- or I would, anyway.

- Q. So the second sentence of paragraph 6 says,

 "TCEQ" -- of paragraph 6 says, "TCEQ has issued water

 rights for these types of projects; however, acquiring a

 new or amended water right in the Rio Grande would not

 be reasonable as outlined in statement 5."
- When you say "these types of projects," what do you mean?
 - A. Dredging bank stabilization.

- Q. Are you aware of a dredging project in the Rio Grande where TCEQ has issued a water right?
- A. No, but I am aware of dredging projects in other parts of the state where TCEQ has issued a water right because, as I state, if any of the aspect of the project involves storing, taking, or diverting state water, a water right would be required.
- Q. Are there any other reasons why acquiring a new or amended water right would not be reasonable other than the ones listed in paragraph 5?
- A. No. I mean, water availability is a threshold question when making a determination on whether a new permit can be granted.
- And if there's limited to no water available for any uses, then we wouldn't be able to issue a new water right.

Q. So the next sentence of paragraph 6 says, "Even if weirs, debris, and other obstacles were removed, releasing water solely for the purpose of raising the water depth in the Rio Grande is also not reasonable because a Texas water right would be required" -- I'll stop there.

What is a weir?

- A. It can be a -- it's a structure that can be put along or in a river.
- Q. (BY MR. HARRISON) Does surface water get diverted when there are weirs in the water?
- A. It can be. A weir can be used to facilitate a diversion.
 - Q. And do weirs require a water right permit?
 - A. They can.

- Q. What do you mean by "debris"?
- A. I think the intent of that was to talk about if you went and dredged and moved any kind of -- what someone might perceive as obstructions or whatever from the river, that even if you did that, it -- you still couldn't make a release of water outside the incidental uses that we've talked about for navigation purposes without a water right, which is not possible to get.
- Q. So like debris -- debris would be things like tree limbs or leaves or tree parts, things like that?

- A. Yeah, or, you know, anything else that could have been put in the waterway.
 - Q. Man-made objects?

- A. Somebody could put trash or cars or anything like that. It could also be -- people -- people do those sorts of things.
- Q. And can surface water get diverted when there is debris in the water?
- A. I mean, if someone has an authorized diversion, they can -- they may -- or it may -- the debris may or may not interfere with their diversion. I mean, that's pretty broad.
 - Q. What do you mean by, quote, "other obstacles"?
 - A. I was just trying to be comprehensive.
- Q. So would removal of other obstacles potentially require a water right or permit?
- A. I think it just depends, again, on the nature of the project and the specifics as embodied in the water right permit application.
 - Q. Would other obstacles include nets or netting?
- A. I mean, I don't know that that's an obstacle but, again, I would have to -- it would depend on project specifics.

And, you know, I can't really answer those type of questions without the specific projects in front

Page 72 1 of me. Q. Would a cableway be an obstacle? Α. On obstacle to what? 3 Well, would it constitute an "other obstacle" 4 5 that you reference in paragraph 6? Α. I don't know. 6 7 Would anchors constitute an obstacle or "other obstacle" that you reference in paragraph 6? 8 I wasn't talking specifically when I said 9 "other obstacles." I mean, we could go down a long --10 11 Ο. Sure. 12 -- laundry list if you'd like; but I'm speaking Α. 13 more generally. But is it your opinion, then, that the removal 14 15 of other obstacles would require a water right or permit? 16 If any of that was part of a dredging or bank 17 18 stabilization project or other project that required 19 storing, taking, or diverting state water, a water right 20 permit from TCEQ would be required. 21 The Texas Water Code prohibits obstructing of 22 any navigable stream, correct? 23 Α. There are some provisions related to that. (Alexander Exhibit 6 marked.) 24 25 Q. (BY MR. HARRISON) I'll show you what's marked

Page 73 as Alexander Exhibit 6. 1 2 This is Texas Water Code 11.096. Do you see that? 3 Α. Yes. 4 5 0. And what -- is this the provision of the Texas Water Code that you agreed about that prohibits the 6 7 obstruction of navigable streams in Texas? That's the one I was thinking about, yes. 8 And it says, quote, "No person may obstruct the 9 navigation of any stream which can be navigated by 10 steamboats, keelboats or flatboats by cutting and 11 12 felling trees or by building on or across the stream any dike, milldam, bridge, or other obstruction." 13 14 Did I read that correctly? 15 Yes. Α. And the Texas TCEQ's regulations define person 16 to include -- I think we talked about this --17 individuals, corporations, correct? 18 19 Α. Yes. Municipalities? 20 Q. 21 Α. Yes. 22 Q. Irrigation districts? 23 Α. Yes. And Texas agencies as well? 24 Q. 25 Α. Yes.

Page 74 Q. And the Water Code also gives TCEQ the 1 2 authority to investigate issues related to obstruction of navigable streams, correct? 3 I believe so. 4 Α. 5 Q. Are you familiar with the floating buoy barriers at issue in this litigation? 6 7 Somewhat. A. How are you familiar? 8 Q. I mean, I read the news. 9 A. 10 Q. Have you been to the site in Eagle Pass? Α. 11 No. 12 Q. Have you seen pictures? I believe I've seen pictures. 13 Α. Is any surface water being diverted by the 14 floating barriers? 15 I don't know. 16 Α. 17 How would you make the determination on whether surface water was being diverted by the floating 18 19 barriers? 20 I think we would go out and look at the 21 project, review the photographs, et cetera; but I didn't 22 see any evidence of any diversion by the floating barriers as we would define "diversion." 23 How do you define "diversion"? 24 Q. 25 As removing water from the watercourse. Α.

Q. But I thought -- you testified earlier that there's no de minimis level of diversion that's necessary to implicate the need for a water right or permit.

So how would -- how were you able to make that determination with -- without doing anything more?

- A. Reviewing the photographs that I've seen, I mean, I -- you know, I -- to the best of my knowledge, there's nothing about that project that would require a water right from TCEQ.
- Q. You said one of the things that TCEQ may do is go out and look at the project. Are you aware of anyone from TCEQ going to look at the floating barriers?
 - A. I'm not aware of that, no.
- Q. What about -- are you familiar with the -- that below the surface of the floating barriers there's an anti-dive net?
 - A. No.

- Q. Were you -- in the photos that you saw, were you also able to see that there were anchors with the floating barriers?
 - A. No.
- Q. If a tourism company like, say, a rafting company were to buy up water rights for the purpose of navigation so that it could have kayaks or rafts, what

of their project so -- but, you know, there are certain types of dredging, as I state in here, that could -- that could require a water right permit from TCEQ.

Q. Then the next sentence says, "A Texas water right authorizing a new appropriation of water would be required for each dam and lock and the reservoirs created by them."

What is the basis for your statement that a new water right would be required for each of them -- each dam and lock and reservoir?

A. So a new water right would be required for each one. It could be -- someone could theoretically apply for a water right that authorized multiple structures.

We do have that in Texas.

But each one would need to be listed and set out in the water right permit or they could be done as individual permits. That's the discretion of the permit -- of the permit applicant.

- Q. And who would be the permit -- permit applicant responsible for obtaining the water right in that situation?
 - A. I have no idea.
- Q. Then the last -- your last sentence at the bottom of Page 10, paragraph 7, "Acquiring a new water right for maintaining locks, dams, and reservoirs would

not be reasonable because acquiring a new Texas water right would not be possible."

I think we've talked about this before. When you say "not be reasonable," is the reasonable standard the same as what you discussed before?

A. Yes.

- Q. And that's because it -- actually is that because the -- a new water right would not be possible to be acquired?
 - A. Yes.
- Q. Is TCEQ accepting new water rights -- or is TCEQ accepting new water right permit applications for water rights on the Rio Grande currently?
- A. I'm not aware of any but, again, anyone could certain -- could apply but TCEQ would also look at water availability.

And if there's no water available under

Texas Water Code 11.134, we wouldn't be able to grant a

new water right.

So, I mean, someone could apply for anything they wanted to; but that doesn't mean that it can be granted under statute and rule.

Q. So are you saying, then, that a congressionally authorized project to aid navigation is impossible because the Corps could not obtain a Texas water right

Page 81 1 or water use permit? 2 I think a Texas water right permit would be 3 required, and I don't believe that would be possible. That's what my opinion says. 4 5 Q. But the Corps or the federal sponsor could 6 apply for the appropriation to Texas, correct? Α. They could apply, yes. Is it possible the Corps could take existing 8 Q. 9 water rights through condemnation if the project authorizes them to do that? 10 11 I don't know. A. 12 Q. Do you have any new water right application 13 pending from the Corps on these potential navigation 14 projects? 15 Not that I'm aware of. Α. 16 And so are you providing an opinion that a 17 water right would not issue based on a nonexistent 18 application to TCEQ? 19 Α. Okay. Can --20 Q. I can rephrase. 21 A. Okay. 22 So there's no pending application that you're Q. 23 aware of for a water right with respect to a 24 hypothetical navigation project, correct? 25 **A** . That's correct.

Q. If TCEQ does not have a pending application, then how are you in a position to prejudge the determination that would be issued as a result of that -- of that application?

- A. Well, if you're asking me do I know that there -- how do I know that there's no water available for appropriation, I would say 25 years of experience in Texas water rights permitting gives me the ability to make that statement.
- Q. And you don't see that as a pre-decisional result?
- A. No. I think that there are various river basins across the state, including the Rio Grande, where it would not be possible to grant a new appropriation of water because the water has already been committed to other users.

So it's not -- the Rio Grande isn't special in that respect.

- Q. You had testified earlier that the Corps had -that you had worked on the Corps water supply reservoirs
 projects. Could you identify those?
- A. So I think what I had talked about is that we had worked with the Corps of Engineers on various things related to their water supply reservoirs.

I mean, that could range anywhere from the

water supply rule that the Corps proposed and then withdrew to working with various Corps of Engineers facilities to ensure that they are releasing water when required for the Texas uses because the Corps has the bucket and Texas has the water.

I'm also working -- there's a Corps project currently underway to look at drought contingency planning for two of their projects or groups of projects. And I am working with the Corps and its consultants on that.

So I think, to answer your question, yes, we do work with the Corps of Engineers.

- Q. But none of those things that you describe include or involve water right applications or permits?
 - A. No.

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- Q. Other than what's on paragraphs 1 through 7 of Exhibit 1, are you providing any other expert opinions in this matter?
 - A. No.
- Q. Have you been asked to form any other opinions in this matter?
 - A. No.
- Q. Are there any other areas pertaining to this matter that we haven't discussed that you have prepared opinions on?

A. No.

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- Q. In your position at TCEQ, do you conduct water availability models and modeling?
- A. I use the water availability models in my position at TCEQ.
- Q. And do you do that modeling for other Texas agencies if they ask?
- A. I'm not aware of us doing that. Other Texas agencies may have their own internal staff or consultants that would do that work.
- Q. We were talking earlier about the definition of "navigable stream" under the TCEQ regulations 279 -- or 297.1(35).

And as part of that I think you said that certain uses on a Texas navigable stream require a water rights permit. What -- what would those uses be?

A. So I think what I was referring to in that question and answer was that there are certain uses that are exempt from water rights permitting under the Texas Water Code for domestic and livestock purposes, in particular, a domestic and livestock reservoir impounding 200 acre-feet or less.

But such a reservoir, in order to be exempt from the permitting process, cannot be located on a navigable stream. So that's what I was referring to.

Page 85 1 Q. Were you ever contacted by anyone in other 2 Texas agencies concerning the floating barriers at issue 3 in the case? 4 A. No. 5 Q. Are you aware of any of your TCEQ colleagues that were contacted by other Texas agencies about the 6 7 barriers? A. No. 8 MR. HARRISON: That's all I have. I'll 9 pass the witness. 10 11 MR. TEBO: Thank you. 12 MR. HARRISON: Thank you, Dr. Alexander. 13 EXAMINATION BY MR. TEBO: 14 15 Q. Dr. Alexander, did you testify today that you had te -- that you had previously -- well, excuse me. 16 Dr. Alexander, did you testify that TCEQ 17 cannot grant new use rights solely for navigational 18 19 purposes? A. Yes. 20 21 Are you an expert on how TCEQ understands the 22 state statutes that it is subject to? 23 Α. Yes. Did you testify that under TCEQ's own internal 24 25 understanding of those statutes, it is not authorized to

grant water rights solely for navigational purposes?

A. Yes.

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- Q. Did you testify that you had testified on behalf of TCEQ before?
 - A. Yes.
- Q. Is it common for you to testify on behalf of TCEQ more frequently than once or twice per year?
- A. It's typically not more frequently than once or twice per year. Although, 2022 through 2024 was an exception.
- Q. But in an average year, would you say that, at most, you testify approximately twice or so per year?
 - A. Yeah, once or twice, that's correct.
- Q. Thank you. To the best of your knowledge, do the buoys that Texas has deployed in the Rio Grande River near Eagle Pass store, take, or divert state water?
 - A. They do not.
- Q. And you haven't seen or heard anything tending to suggest that the buoys do store, take, or divert water?
 - A. I have not.
- Q. Dr. Alexander, did you testify that you were familiar with the treaties and laws that regulate water use of the Rio Grande -- of the waters of the Rio Grande

Page 87 River? 1 2 Α. Yes. And you testified that that included the 1944 3 Water Treaty between the United States and Mexico? 4 5 Α. Yes. Are you also familiar with other binational 6 7 water treaties that relate to the waters of the Rio Grande River? 8 A. Yes. 9 Is it fair to say that you are generally 10 familiar with the binational treaties that relate to the 11 12 waters of the Rio Grande River? 13 A. Yes. Did you testify about interactions between TCEQ 14 15 and the IBWC? 16 Α. Okay. I --17 I'm sorry. Did you testify today concerning 18 typical interactions between TCEQ and the International 19 Boundary and Water Commission? 20 Yes, in very general terms. 21 Q. Yeah, in general terms. 22 Did you say that the -- or would you say that the IBWC handles the distribution of waters between 23 the United States and Mexico, whereas TCEQ handles water 24 pit -- permitting to the US share of waters? 25

Page 88 1 2 MR. HARRISON: Objection, form. I think that's accurate, yes. 3 Α. (BY MR. TEBO) And did you testify today that 4 5 Texas has primary jurisdiction over the US share of 6 waters of the Rio Grande? 7 A. Yes, I did. 8 And by that -- I mean, by Texas having primary 9 jurisdiction to the US waters for the Rio Grande, by 10 that phrase did you mean that Texas controls the use of 11 US waters of the Rio Grande? 12 Α. Yes. 13 Did you also mean by that phrase that state law 14 and not federal law governs the use of those waters? 15 Α. Yes. 16 Would any use of the Rio Grande's waters by the 17 US Army Corps of Engineers or other federal entities be 18 subject to approval by Texas including through TCEQ? 19 For a water rights permit, yes, it would. Α. Has any court determined that the Rio Grande 20 21 River is a navigable stream under state law? 22 MR. HARRISON: Objection, form. 23 Α. Not that I'm aware of. 24 Ο. (BY MR. TEBO) And does state law itself define 25 the Rio Grande as a navigable stream?

Page 89 A. No. 1 2 Ο. Did you testify that you're an expert on conditions -- on the river conditions of the Rio Grande 3 River? 4 5 Α. Yes. In light of that expertise, are you aware of 6 Q. 7 any actual navigation that takes place on the Rio Grande River? 8 I am not. 9 Α. 10 Now, if navigation is granted as an incidental use to an existing water right, is the right holder 11 12 entitled to use any additional water for navigation 13 purposes? 14 Not in addition to what's already been 15 appropriated. 16 Q. So you're saying that that water right user is restricted to the exact quantity granted by his original 17 18 water right? 19 MR. HARRISON: Objection, form. 20 Α. That's correct. 21 Ο. (BY MR. TEBO) Let me just restate the question. Is the original water right user in that 22

scenario restricted to the exact quantity granted by his water right?

A. Yes.

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